

## PLATE IV.

### DESCRIPTION OF A NEW GENUS BELONGING TO THE FAMILY OF THE LOCUSTS.

THE family of the locusts, LOCUSTIDÆ, Leach ; (*Acridites*, Latr., Serv. ; *Acridiodea*, Burm. ;) is one of very great extent, and contains many species remarkable for their extraordinary powers of devastation, (it being now ascertained that other species besides the *L. migratoria* migrate in vast swarms, spreading alarm throughout their route,) as well as many others, which, from their remarkable forms and brilliant colours, do not fail to attract attention.

The distribution of the family into sub-families and genera has been but comparatively little attended to ; and it is greatly to be regretted that the works of Burmeister and Serville appeared almost simultaneously, so that a considerable diversity exists between them, not only in the nomenclature of the genera and species, but also in their classification and the limits of the genera. Two of Serville's sub-families, namely, the *Truxalides* \* and the *Conophori* †, appear to blend together very naturally : the genus *Pækilocera*, Serv., (*Pœcilocera*, Burm.,) which is placed by Serville amongst the *Truxalides*, being considered by Burmeister as referable to the *Conophori* ; indeed, the last-named author unites Serville's genera *Pækilocera*, *Petasia*, and *Phymatea*, into one genus.

The remarkable insects here figured constitute a new genus, which still more closely unites these two sub-families. We have in fact the pyramidal head, with the oblique face, of the *Truxalides*, and the flattened and dilated basal joints of the antennæ, and the forehead produced into an obtuse point between the antennæ, of the *Conophori*. The remarkable distinction which exists in the structure of the antennæ of the opposite sexes is a peculiarity which exists, as far as I recollect, in no other species of this family. Another striking peculiarity consists in the form of the wing-covers. In the typical species, these represent a broad, fresh leaf ; while in the Chinese species, they are narrower, and resemble a withered

\* Distinguished by having the head pyramidal in front, with the face more or less oblique and the antennæ often ensiform, with prismatic joints.

† Distinguished by having the face vertical, the antennæ but rarely ensiform, with the joints distinct ; the forehead produced between the antennæ in a thick joint, with a deep groove beneath to receive the base of each of the antennæ.

leaf. No other instance of this kind of analogy occurs to my recollection amongst the Locustidæ, although it is of constant occurrence amongst the grasshoppers with long antennæ.

From the very compressed form of the body (another remarkable character) the genus may be named

SYSTELLA, W.

Corpus compressissimum. Caput ante oculos et inter antennis productum, facie valde obliqua convexa integra sc. haud carinata. Clypeus distinctus. Labrum antice in medio fissum. Palpi breves filiformes, labiales minores. Antennæ secundum sexum formæ variæ; in fossula tuberculi frontalis utrinque insertæ, articulis 2bus basalibus distinctis, sequentibus 4 aut 5 arcte coalitis, deplanatis margine interno crassiori, externo acuto, in ♀ multo latoribus; articulis reliquis distinctis gracilioribus (in ♂ multo longioribus), apicali attenuato. Prothorax compressus, dorso plano integro, lateribus angulatis. Prosternum tuberculo acuto armatum. Abdomen compressum alis brevius, segmento ultimo ventrali in ♂ maximo inflato. Pedes 4 antici breves, 2 postici saltatorii; tibiis serie duplici spinarum æqualium extus armatis; tarsi 3-articulati unguibus acutis, pulvillo magno. Tegmina magna foliiformia, supra dorsum horizontaliter elevata, angulo externo antico emarginato.

This genus appears to me, from the structure of its antennæ, to be most nearly allied to *Akicera* and *Porthetis*, Serville, (*Pamphagus*, Burm.) and to *Xiphicera*. From these, however, as well as all the other genera of the family, it is separated by the peculiar characters above noticed.

SPECIES I.—*Systella Rafflesii*, W. *Luteo viridis, tegminibus viridibus latissimis, oculo magno fusco in area costali notatis*. Long. corp. ♂ lin. 13½, ♀ 18. Expans. tegmin. lin. 34½.

Antennæ 15-articulatæ in ♂, 14 in ♀; articulis 3—7 in ♂, 3—6 in ♀, coalitis dilatatis subprismaticis, in ♀ multo latoribus, 8 reliquis in ♂ fere equalibus et filiformibus, in ♀ vero articulis 7 et 8 sensim angustatis, reliquis 6 distinctis irregularibus. Vena postcostalis tegminum ramos 5 simpliciter punctatos emittit; vena mediana duos tantum. Apex marginis costalis in ♀ valde, in ♂ parum, emarginatus. Tibiæ 4 anticæ fusco-annulatæ.

A single female specimen of this species is in the collection of the Zoological Society, and was presented by Sir Stamford Raffles, by whom it was most probably collected in Sumatra. I also detected a male in the collection formed by H. Cuming, Esq., in the Philippine Islands, and destined for the British Museum.

SPECIES II.—*Systella Hopei*, W. *Fusca, tegminibus fusco luteo albidoque variis, angustioribus; emarginatura apicali marginis antici vix conspicua*. Expans. tegmin. lin. 35.

Præcedenti multo tenuior, fusca, dorso prothoracis et capitis scabro, linea tenui fulva inter oculos; antennæ (♂?) 17-articulatæ, articulis 11 ultimis distinctis longitudine decrescentibus, luteis. Tegmina luteo-fusca nubila magna media (albido posticè cincta) ad costam angustata maculisque quadratis minoribus marginis postici fuscis, venis punctatis punctisque nonnullis majoribus inter venas. Abdomen et pedes postici mutilati.

This species is unique in the collection of the Rev. F. W. Hope, F. R. S., &c., and is a native of China.

The plant figured is the Indian *Ceropegia Juncea*.